

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

1-23. (Cancelled).

24. (Currently Amended) In a computer system, the computer system including system memory, a processor, and a computer-readable medium, a data store and a method store being stored on the computer-readable medium, the data store and the method store arranged together in a combined item hierarchy on the computer-readable medium, the data store having least one data item that depends from a method in the method store and the method store having at least one method that depends from data in the data store, the combined item hierarchy that includes items stored in at least one volume, the volume being divided into at least one or more non-overlapping security zones, each of the at least one or more non-overlapping security zones being defined as a grouping of one or more data items and one or more method items having common security rules, each item residing in a non-overlapping security zone from among the at least one non-overlapping security zone, each non-overlapping security zone having one or more such that principals with administrative rights to items in a non-overlapping security zone can treat all the items in the non-overlapping security zone uniformly in accordance with common security rules, a method of splitting the one or more non-overlapping security zones into a plurality of non-overlapping security zones to facilitate more efficient delegation[[g]] of administrative rights to other principals for first items included in a main non-overlapping security zone included in the at least one non-overlapping security zone, comprising:

an act of identifying first a grouping of data items and method items in the combined item hierarchy for which new common security rules are to be enforced, the identified grouping of data items and method items currently included in an existing non-overlapping zone from among the one or more non-overlapping zones, existing common security rules being enforced within the existing non-overlapping zone, the new common security rules differing from the existing common security rules being enforced within the existing non-overlapping zone and other items for which common security rules are to be maintained independent from the common security rules of the identified first items

~~residing in a main non-overlapping security zone within a volume comprising a plurality of non-overlapping security zones;~~

an act of the processor re-configuring the one or more non-overlapping security zones so that administrative rights can be delegated at a granularity that is finer than an entire database but yet coarse enough so as to not require delegation for each item, including:

an act of splitting the main-existing non-overlapping security zone into a first-new non-overlapping security zone and a remnant of the existing non-overlapping security zone, the arrangement of the new non-overlapping security zone relative to the remnant of the existing non-overlapping security zone based on the location of the identified grouping of data items and method items within the combined item hierarchy, the new non-overlapping security zone for containing the identified grouping of data items and methods items, the remnant of the existing non-overlapping security zone containing at least one data item or method item from the existing non-overlapping security zone, containing the identified first items for which common security rules are to be enforced, and a remaining non-overlapping main security zone having the other items having common security rules that are not dependent upon the common security rules of the first non-overlapping security zone such that the first non-overlapping security zone and the remaining non-overlapping main security zones do not overlap with any of the plurality of other non-overlapping security zones included in the volume, the one or more main principals retaining administrative rights for the first non-overlapping security zone and the remaining main non-overlapping security zone, the first non-overlapping security zone including the first items and the remaining main non-overlapping security zone including only the other items from the main non-overlapping security zone not included in the first items, and wherein said splitting is restricted in such a way as to prevent overlapping between security zones and such that none of the first items and other data items and method items from the main non-overlapping security zone are present included in more than one security zone when the main non-overlapping security zone is split wherein the security zones thereby have a dynamic configurable

~~granularity of items having common security rules; and~~

an act of adjusting data properties of each of the items in the identified grouping of data items and method items to represent that the identified grouping of data items and method items are contained in the new non-overlapping security zone;

for any principals that had existing administrative rights in the existing non-overlapping security zone based on the existing common security rules being enforced in the existing non-overlapping security zone at the time the existing non-overlapping zone was split, an act of retaining those existing administrative rights in the new non-overlapping security zone, including in the identified grouping of data items and methods items, subsequent to splitting the existing non-overlapping security zone and subsequent to adjusting data properties to represent that the identified grouping of data items and methods items are contained in the new non-overlapping security zone; and

an act of specifying that one or more ~~first~~ additional principals also have other administrative rights to in the identified grouping of data items and method items based on the new common security rules by specifying that the one or more additional principals have the other administrative rights to the new ~~the first non-overlapping security zone containing the first items, such that the entirety of items in the first non-overlapping security zone~~ in accordance with the new common security rules, the other administrative rights differing from the existing administrative rights ~~necessarily have the common security rules.~~

25. (Currently Amended) The method of claim 24, wherein specifying the one or more ~~first~~ additional principals is performed by the one or more main principals.

26. (Currently Amended) The method of claim 24 ~~further comprising~~ wherein the act of adjusting data properties of each of the items in the identified grouping of data items and method items comprises labeling each of the ~~first~~ items with a security zone enumeration corresponding to the ~~first~~ new non-overlapping security zone.

27. (Original) The method of claim 24, the administrative rights being security rights.

28. (Original) The method of claim 24, the administrative rights being auditing rights.

Claims 29-32. (Cancelled).

33. (Cancelled)

34. (Currently Amended) A computer program product for use at a computer system, [[A]] the computer program product comprising one or more computer-readable storage media, a data store and a method stored being stored on the one or more computer-readable storage media, the data store and the method store arranged together in a combined item hierarchy on the computer-readable medium, the data store having least one data item that depends from a method in the method store and the method store having at least one method that depends from data in the data store, the combined item hierarchy being divided into one or more non-overlapping security zones, each of the one or more non-overlapping security zones being defined as a grouping of one or more data items and one or more method items having common security rules such that principals with administrative rights to items in a non-overlapping security zone can treat all the items in the non-overlapping security zone uniformly in accordance with common security rules, the computer-readable storage media also that storing[[e] computer-executable instructions that, when executed by a processor, cause the computer system to perform a method of splitting the one or more non-overlapping security zones into a plurality of non-overlapping security zones to facilitate more efficient delegation[[g]] of administrative rights to other principals for first items included in a main non-overlapping security zone included in at least one non-overlapping security zone, comprising:

an act of identifying first a grouping of data items and method items in the combined item hierarchy for which new common security rules are to be enforced, the identified grouping of data items and method items currently included in an existing non-overlapping zone from among the one or more non-overlapping zones, existing common security rules being enforced within the existing non-overlapping zone, the new common security rules differing from the existing common security rules being enforced within the existing non-overlapping zone and other items for which common security rules are to be maintained independent from the common security rules of the identified first items residing in a main non-overlapping security zone within a volume comprising a plurality of non-overlapping security zones, wherein the security rules comprise an access control list defining the rights a principal has to the items in the security zone associated with the security rules;

an act of the re-configuring the one or more non-overlapping security zones so that administrative rights can be delegated at a granularity that is finer than an entire

database but yet coarse enough so as to not require delegation for each item, including:

an act of splitting the main-existing non-overlapping security zone into a first-new non-overlapping security zone and a remnant of the existing non-overlapping security zone, the arrangement of the new non-overlapping security zone relative to the remnant of the existing non-overlapping security zone based on the location of the identified grouping of data items and method items within the combined item hierarchy, the new non-overlapping security zone for containing the identified grouping of data items and methods items, the remnant of the existing non-overlapping security zone containing at least one data item or method item from the existing non-overlapping security zone, containing the identified first-items for which common security rules are to be enforced, and a remaining non-overlapping main security zone having the other items having common security rules that are not dependent upon the common security rules of the first non-overlapping security zone such that the first non-overlapping security zone and the remaining non-overlapping main security zones do not overlap with any of the plurality of other non-overlapping security zones included in the volume, the one or more main principals retaining administrative rights for the first non-overlapping security zone and the remaining main non-overlapping security zone, the first non-overlapping security zone including the first items and the remaining main non-overlapping security zone including only the other items from the main non-overlapping security zone not included in the first items, and wherein said splitting is restricted in such a way as to prevent overlapping between security zones and such that none of the first items and other data items and method items from the main non-overlapping security zone are present included in more than one security zone when the main non-overlapping security zone is split wherein the security zones thereby have a dynamic configurable granularity of items having common security rules; and

an act of adjusting data properties of each of the items in the identified grouping of data items and method items to represent that the identified grouping of data items and method items are contained in the new non-overlapping security zone;

for any principals that had existing administrative rights in the existing non-overlapping security zone based on the existing common security rules being enforced in the existing non-overlapping security zone at the time the existing non-overlapping zone was split, an act of retaining those existing administrative rights in the new non-overlapping security zone, including in the identified grouping of data items and methods items, subsequent to splitting the existing non-overlapping security zone and subsequent to adjusting data properties to represent that the identified grouping of data items and methods items are contained in the new non-overlapping security zone; and

an act of specifying that one or more ~~first~~ additional principals also have other administrative rights to in the identified grouping of data items and method items based on the new common security rules by specifying that the one or more additional principals have the other administrative rights to the new ~~the first non-overlapping security zone containing the first items, such that the entirety of items in the first non-overlapping security zone~~ in accordance with the new common security rules, the other administrative rights differing from the existing administrative rights necessarily have the common security rules.

35. (Cancelled)

36. (Currently Amended) The method of claim 24, wherein the existing common security rules comprise an access control list defining the rights a principal has to the items in the remnant of the existing non-overlapping security zone associated with the security rules.

37. (New) The method of claim 24, wherein the new common security rules comprise an access control list defining the rights a principal has to the items in the new non-overlapping security zone.

38. (New) The computer program product of claim 34, wherein specifying the one or more additional principals is performed by the one or more main principals.

39. (New) The computer program product of claim 34, wherein the act of adjusting data properties of each of the items in the identified grouping of data items and method items comprises labeling each of the items with a security zone enumeration corresponding to the ~~first~~ new non-overlapping security zone.

40. (New) The computer program product of claim 34, the administrative rights being security rights.

41. (New) The computer program product of claim 34, the administrative rights being auditing rights.

42. (New) The computer program product of claim 34, wherein the existing common security rules comprise an access control list defining the rights a principal has to the items in the remnant of the existing non-overlapping security zone.

43. (New) The computer program product of claim 34, wherein the new common security rules comprise an access control list defining the rights a principal has to the items in the new non-overlapping security zone.